Appendix I
Individual Summary Reports

Region III Public Meeting 1 — Librarians Charlottesville, Virginia February 23, 1999

Background

In October 1998, the EPA Region III Public Sector Needs Identification Team launched an assessment of customer needs and preferences for environmental information. This assessment involved a series of five facilitated public meetings conducted in cooperation with the EPA Region III office. Each meeting investigated a different stakeholder group, its current information gathering methods, its information needs, special issues for the stakeholder group, and investigation of the Customer Information Process (CIP) and Information Attribute (IA) priorities for the group.

The CIP and IA analysis tools were developed in 1997 for an EPA customer study conducted by the Center for Environmental Information and Statistics (CEIS) and the Environmental Monitoring for Public Access and Community Tracking (EMPACT) Program. This study sought to characterize customer needs for environmental and health-related information, preferences for accessing information, and interest in having more time-relevant monitoring and reporting capabilities. The CIP/IA framework is described in more detail below.

Summary Statement

The public meeting in Charlottesville, Virginia brought together public, university, and Federal agency librarians and other information service representatives, including one environmental planner from a local Planning District Commission and a Program Director of a non-profit environmental education organization. The group agreed that *Access EPA* and EPA's recently improved Web site were services that were most helpful to them. There was consensus that EPA should clearly identify the staffers responsible for information within EPA as well as other agencies and organizations. The group focussed on acquisition and integration of information, and much of the discussion revolved around the usefulness of electronic versus printed formats. Internet access varied across the group, and the more experienced Internet users implied that the Internet should become the dominant mechanism to house and access environmental information. However, some members of the group were concerned that EPA did not have a mechanism in place to archive data that was only published electronically. All participants agreed that EPA must continue to manage their current and historical information in such a way that all libraries

and users may continue to access it regardless of their level of computer expertise or access to the Internet.

Wish List

The group strongly agreed that EPA could improve their provision of information services by: recognizing and acknowledging different levels of various users (academic versus average citizen) and the need to supply services for the lowest common denominator as well as the technical user; developing an educational mission and public relations campaign; and developing a centralized point of access to both printed and electronic formats of all information and data produced by EPA on regional and national levels. These three specific goals were developed by the group as a summary of their more extensive "wish list:"

- Better promotion of EPA data;
- Central point of access to all of EPA's current and historical environmental research and information;
- Clearinghouse of local and regional contacts for information, internal and external to EPA;
- An updated version of *Access EPA* that is free to public libraries and available in both printed and electronic formats;
- Glossary (thesaurus) that defines terms and jargon;
- Presentation of all information in laymen's terms;
- Educational programs for kids and adults that explains the EPA mission and goals;
- Development, maintenance, and improvement of the EPA Web site; and
- Some combination of printed and electronic data formats for EPA data and publications.

Information Experience

The group's discussion highlighted that specific, local information was most often requested by local citizens. However, Federal and state EPA data did not include this level of specificity, and questions remained largely unanswered. As one participant pointed out, "The most frequent . . . unfulfilled request that we get is how to get data on a very specific kind of stream or water body. With EPA's Web site you can now put in ZIP Codes . . . for whatever the watershed area is that you're looking for, but it doesn't help me with the little creek that runs behind my house." Participants agreed that when looking for geographic data, going to a state agency for information proved to be more successful than going to the local or Federal level. A member added, "The local governments aren't responsible for gathering the data and don't tend to have the data, and when I've tried looking on a Federal level, I've mostly found that the data came in larger geographic areas than I was interested in."

In addition, the group discussed that local citizens often required instruction on where to look for information because it was not clear what agency or office was responsible for any given situation. One member stated, "What the person calling needs is a road map on what EPA is in control of versus DEQ versus the Planning District versus a small non-profit versus my neighborhood association." One participant suggested that a context be provided that would explain why certain information is developed by one agency or another. "I think it really helps

people to understand why EPA does certain types of reports and why Fish and Wildlife does others. And it helps people to know which agency to go to."

The group strongly agreed that *Access EPA*, a publication that tells who is responsible for different areas within EPA, was an incredibly useful tool for directing clients to and within EPA. One participant captured the group's strong feelings about this document when he stated, "*Access EPA* was the single greatest tool, at that time, that EPA ever put out for those of us who were trying to get information to other folks." While *Access EPA* is currently available via the Internet, many requested that they also receive an updated printed version of *Access EPA* as they once had in the past.

Attendees also stated that there was no one specific place or person that they often turned to for information, however they tended to find what they need informally through their personally created networks, which included local contacts and colleagues in the area. They occasionally garnered other contacts through national meetings of associations. One referred to this as "the good old underground network" they built locally and extended nationally.

Participants briefly discussed timeliness of data, commenting that people "want tomorrow's results today." Members joked that if a report was on ABC News, citizens would definitely walk into the library the next day requesting to see it.

Problems with EPA Information

Much of the discussion focussed on how to make environmental information more meaningful to the public. There was strong agreement among the participants that most public users were less interested in the raw data, and more interested in the analysis of the data and final conclusions. It was noted that EPA's Web site required more explanation of the data and information contained on the site so that a lay person could understand how the information was personally relevant. One attendee said, "I think for many of our users, if not the majority of users on the community level, they want some sort of conclusion drawn from the data or at least a statement that some trend is shown here." With regard to how EPA's Web site handled the transfer of information to the user, one participant stated, " . . . there was nothing there on that Web page that I saw that I could click on to explain what PCB was or what percentage was bad or good." This participant suggested that EPA add a legend to explain what is "good or bad" about the data being presented. Members stressed that users needed a certain depth of explanation and also strongly suggested that a glossary of terms or thesaurus on the Web site would help their clients develop a context for the information.

Special Areas

There was some agreement that access to information was greatly facilitated by the growth and development of the World Wide Web, and that the Internet became a very important tool for librarians. One participant remarked, " . . . I think electronic files are becoming more and more important . . . " However, there was strong consensus that a diversity of approaches to the presentation of information was still needed. This idea was supported by one member who

stated, " . . . one fear I have about the electronic movement, though I support it, is that it will cut people off who aren't in that world." There was still great variability in Internet access between public and University libraries, and a few of the attendees stressed that increased use of electronic formats was not as useful to them as having the printed materials available. One participant stressed that, at the very least, EPA must continue to notify the Government Printing Office of files available only through electronic means, because the GPO was the main contact for public and academic libraries for information.

Information Management Priorities

The librarians thought that EPA should keep in mind certain information management priorities as they look to the future.

- Repeatedly, the group remarked that *Access EPA* was an incomparable document for environmental research. They suggested EPA develop an updated print version and send it to every public library.
- The group also acknowledged the importance of making electronic access as useful as possible. While the group strongly appreciated the recent changes in the EPA Web site, they encouraged more work for accessibility and information retrieval.
- Lastly, participants related concerns that EPA was not adequately prepared to deal with electronic information. In particular, the group focussed on practices surrounding archiving information.

Archiving of historical data was a great concern to some participants as information access and storage moves from paper to electronic. For example, attendees stressed the importance of referencing historical data when investigating the current quality of a river. Participants agreed that no mechanism was developed by the government for archiving all its electronic information, and wondered how EPA was addressing that issue. With regard to all historic data and archiving, one speaker pleaded, "Just don't let it get lost."

There was strong agreement that the EPA Web site had been improved enormously with regard to presentation, navigation, and load-time. The listserves EPA developed for environmental information were a great help in exchanging information, and EPA's on-line publications were used frequently. Participants suggested that EPA could improve the site by allowing access to its search engine on every page.

There was some disagreement as to whether or not it was appropriate to have links from EPA's Web site to potentially partisan Web sites that could provide some context to and/or commentary on EPA data. One attendee thought that it might be helpful if EPA tried to resolve differing opinions on the interpretation of data and information to help the user draw a conclusion; another strongly believed that EPA's role was to simply provide the most objective, unbiased information. He noted, "EPA can't be all things to all people," and suggested that EPA simply follow its mission to provide the information and let the user deal with its interpretation. This was clearly a controversial topic, and although the majority of participants felt that EPA should refrain from linking to any of these environmental organizations, no consensus was reached.

Customer Information Process/Information Attributes

EPA adopted a framework to compile and categorize meeting commentary. This framework included an assessment of the Customer Information Process (CIP) and the Information Attributes (IA) important to EPA stakeholders. The CIP has four basic elements: Identification (establishing the existence and location of information), Acquisition (obtaining the information in an appropriate format), Management (adapting, translating, integrating, or combining the information to the customer's unique purpose), and Use (applying, interpreting, or assimilating the information in a value-added manner). Second, the meetings have been assessed according to Information Attributes. Topical attributes for the IA analysis included: Media (e.g., air, water); Industry (sector), Geography (e.g., site specific, local, regional); Legislation/Regulation; Time Dimension (e.g., update schedule); Demographics; Accuracy/Reliability; and Other Topics such as health concerns.

This section highlights the CIP and IA priorities for the Charlottesville, Virginia librarians meeting.

As a whole, the Customer Information Process was a higher priority for the group than Information Attributes. Integration and use of information were the strongest elements of discussion throughout the meeting. As noted above, it often was stressed that not only should EPA provide a glossary of terms, but they should provide a relevant context that will explain to the lay person what the information really means to them. "People coming into the public library want a conclusion. They want to know [whether] it is harmful. They want the bottom line." Participants also noted that, although what typically was needed was an analysis of the information, how the data ultimately were used really depended on the individual. Information, therefore, needed to be available in all stages and at varying levels of analysis, from preliminary data to final conclusions.

Participants agreed that much of the time they were not clear where to go for certain information, and they often had trouble identifying the office responsible for particular data or datasets. One participant stated, "At one time . . . trying to find out who on earth issued or may have issued a particular dataset . . . was just a nightmare. That's still a problem today with historical publications that go back."

Members were also concerned with acquisition of data in formats that would be useful to not only the public citizen, but also to the librarians. As noted above, because of varying levels of Internet access across libraries, there was strong consensus that there needed to be a combination of paper and electronic access. Opinions on whether or not electronic or paper media should be used also depended on the size of the reports, as well as the type of information (text documents saved as image files, which can be difficult to download, versus spreadsheets containing data that might be more useful to have in electronic format). There was strong agreement that EPA should provide abstracts or summaries of the information or data contained in electronic files, as well as the size of the files, so that users could make more informed decisions about downloading and printing large documents.

Participants were less focussed on Information Attributes, but briefly touched on Geographic Information Systems (GIS) as a useful tool for displaying information graphically and spatially.

With regard to the reliability or balance in the levels of information they received, the group agreed that users at the community level required a higher level of explanation than those in colleges and universities, who were often trying to draw their own conclusions from raw data. One participant explained that the feeling of accuracy or reliability was often dependent upon how the user perceived the production of the data, and EPA lent a certain credence to the reliability of the data. Generally, at the community level, the feeling was, "This came from the U.S. Environmental Protection Agency. It's got to be accurate."

EPA/Region III

Few members of the group had contact with EPA libraries. One speaker had called the library in Region III for information about Philadelphia, and noted that if you were looking for "fugitive documents that you know came out of that region," you started with the regional library. He also stated that usefulness and helpfulness varied from library to library, but that his recollection was that generally the regional libraries were very supportive. One participant questioned whether or not EPA was moving in the direction of disseminating their information through the states, rather than through their regional libraries. He was worried that if this happened, EPA would lose the Federal layer of librarians and technicians who "actually know what the heck they're doing."

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